Optics and Lasers in Engineering **10** (1989) 289–290

CONTENTS OF VOLUME 10

Number 1

Editorial 1

New Parameter Correlations for Deep Penetration Welding with High Energy Focused Beams 3
R. PERETZ (FRG)

Using a Total Internal Reflection Diffraction Grating for Investigating Absorbing Liquids 17
S. SAINOV & D. TONTCHEV (Bulgaria)

Recent Advances in Laser Tooling for Flexible Handling Systems 27
R. J. DEWHURST & K. G. SWIFT (UK)

CO_2 Laser Treatment System of *Tinea pedis* 43
MASAHIRO UEDA (Japan)

A High Energy, Electromagnetically Tuned Single-Mode, Short Cavity Picosecond Dye Laser System: Design and Performance 55
P. H. CHIU, P. PAX, J. HENDEN, L. MARSHALL, F. WILSON & R. AUBERT (USA)

Conference Report 69

Book Reviews 73

Announcements 77

Number 2

Surface Topography Using Diffuse Point Differential Interferometry 81
M. AZZAZY (USA)

The Use of Plane-polarized Beams in Controlled Surface Temperature Laser Heat Treating 97
O. DE PASCALE, C. ESPOSITO, M. LEPORE, P. BOFFI, M. GAUDIO & M. VILNIO (Italy)

Illuminated Spot Size and Signal Detection in Laser Doppler Vibrometry . . 109
C. S. VIKRAM & T. E. McDEVITT (USA)

Quality Control of Textile Yarn by Optical Filtering Technique 119
F. FRANCINI & G. LONGOBARDI (Italy)

Research Note
Visualization of Simulated Leakage Flow from Buildings using a Pulsed Laser 127
K.-E. PEIPONEN & T. HARTIKAINEN (Finland)

Optics and Lasers in Engineering (**10**) (1989) © 1989 Elsevier Science Publishers Ltd, England. Printed in Northern Ireland

Laboratory Profile
Profile of WYKO Corporation 133
KATHERINE CREATH (USA)

Book Review 145

Announcement 147

Numbers 3 & 4

Active 3-D Vision System for Automatic Model-Based Shape Inspection . . . 149
ILKKA MORING, HEIKKI AILISTO, VISA KOIVUNEN & RISTO MYLLYLÄ (Finland)

3-D Vision and Range Finding Techniques 161
SERGE MONCHAUD (France)

A Laser Scanning System for the Measurement of Facial Surface Morphology 179
J. P. MOSS, A. D. LINNEY, S. R. GRINDROD & C. A. MOSSE (UK)

High-Precision Image Position Sensing Methods Suitable for 3-D Measurement 191
MASANORI IDESAWA (Japan)

Three-Dimensional Pictures of Industrial Scenes Applying an Optical Radar . 205
REINHARD GRABOWSKI, WERNER SCHWEIZER, JOSEPH MOLNAR & LOTHAR UNGER (FRG)

Compact Three-Dimensional Camera for Robot and Vehicle Guidance . . . 227
FRANÇOIS BLAIS, MARC RIOUX & JACQUES DOMEY (Canada)

Moiré Technique in 3-D Machine Vision 241
K. J. GÅSVIK, T. HOVDE & T. VADSETH (Norway)

Optical Preprocessing for Automated Inspection 251
G. HÄUSLER (FRG)

Photogrammetric Machine Vision 265
HENRIK HAGGRÉN (Finland)

Book Reviews 287